CLAIMS IN CURRENT FORM

A clean set of all pending claims is submitted, consolidating all previous versions of pending claims. No additional amendments have been made to any of the claims by this response.

- 1. (AMENDED) A method of verifying a repair of a design, comprising the steps of:
- (A) generating an enumeration of a plurality of fuses in said design;
- (B) compiling data for each of said fuses, wherein said data comprises simulation path data; and
 - (C) simulating said design with at least one of said fuses programmed for said repair to verify said repair.
 - 2. (AMENDED) The method according to claim 1, wherein said simulation path data comprises verilog simulation path data.
 - 3. (AMENDED) The method according to claim 14, wherein said schematic path data comprises at least one of a schematic path, a property, a hierarchy and a verilog path.
 - 4. (TWICE AMENDED) The method according to claim 1, wherein step (B) further comprises the sub-step of:

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generating a list of layout coordinates and paths in said design as part of said compiling.

5. (AMENDED) The method according to claim 1, further comprising the step of:

generating a fuse report.

6. (AMENDED) The method according to claim 5, further comprising the step of:

listing physical locations of a device in said design in response to said fuse report.

7. (AMENDED) The method according to claim 1, further comprising the step of:

generating a repair file that predicts said at least one of said fuses programmed for said repair.

8. (AMENDED) The method according to claim 7, further comprising the step of:

creating a repair program in response to said repair file.

9. (AMENDED) The method according to claim 8, further comprising the step of:

verifying a function of said design in response to said repair program.

10. (AMENDED) The method according to claim 8, further comprising the step of:

listing an output of said repair program as a list of coordinates for said at least one of said fuses programmed for said repair in terms of a plurality of logical addresses.

11. The method according to claim 10, further comprising the step of:

storing said coordinates in a memory.

- 12. (AMENDED) An apparatus comprising:
- a first circuit configured to enumerate a plurality of fuses in a design; and
- a second circuit configured to (i) compile data for each of said fuses, wherein said data comprises simulation path data and (ii) perform a simulation said design with at least one of said fuses programmed for a repair of said design to verify said repair.
 - 13. (AMENDED) An apparatus comprising:

means for generating an enumeration of a plurality of fuses in a design;

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means for compiling data for each of said fuses, wherein said data comprises simulation path data; and

means for simulating said design with at least one of said fuses programmed for a repair of said design to verify said repair.

- 14. The method according to claim 1, wherein said data further comprises schematic path data.
- 15. The method according to claim 1, wherein said data further comprises physical location data.
- 16. The method according to claim 1, further comprising the step of:

mapping a plurality of co-ordinates of said fuses to a plurality of verilog program statements.

17. The method according to claim 8, further comprising the step of:

checking said repair file and said repair program for an error.

- 18. The apparatus according to claim 12, wherein said first circuit is further configured to provide an elevation of said fuses at least one level of abstraction in said design.
- 19. The apparatus according to claim 12, wherein said first circuit is further configured to collect data relevant to said fuses that are grouped.
- 20. The apparatus according to claim 12, wherein said second circuit is further configured to write a report file.